

Listing of the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Claims 1-24 (Cancelled).

Claim 25 (Currently Amended): A wireless communication system, comprising:

a first wireless communication node having a first MAC layer element adapted to generate a request to transmit a particular data element, the request including a transmission bandwidth for the data element and a transmission priority for the data element ~~The wireless communication system of claim 24,~~ wherein the transmission priority is encoded in an IEEE 802.1Q tag ~~within the request,~~ and a physical layer element operatively coupled to the first MAC layer element adapted to transmit the request; and

a second wireless communication node having a second physical layer element adapted to receive the request from the first wireless communication node and a second MAC layer element operatively coupled to the second physical layer element adapted to determine acceptance of the request based on the transmission bandwidth and schedule transmission of the data element based on the transmission priority.

Claim 26 (Currently Amended): The wireless communication system of claim ~~24~~ 25, wherein the transmission bandwidth is determined based on an examination of the data element.

Claim 27 (Currently Amended): The wireless communication system of claim ~~24~~ 25, wherein the second MAC layer element determines acceptance of the request and schedules transmission of the data element without resort to any network layer element.

Claim 28 (Currently Amended): The wireless communication system of claim ~~24~~ 25, wherein the first wireless communication node is an IEEE 802.11 peripheral system.

Claim 29 (Currently Amended): The wireless communication system of claim ~~24~~ 25, wherein the second wireless communication node is an IEEE 802.11 access point.

Claim 30 (Cancelled).

Claim 31 (Currently Amended): A wireless communication node, comprising:
a physical layer element adapted to receive a request to transmit a particular data element, the request including a transmission bandwidth for the data element and a transmission priority for the data element ~~The wireless communication node of claim 30, wherein the transmission priority is encoded in an IEEE 802.1Q tag within the request;~~ and

a MAC layer element operatively coupled to the physical layer element, the MAC layer element adapted to determine acceptance of the request based on the

transmission bandwidth and schedule transmission of the data element based on the transmission priority.

Claim 32 (Currently Amended): The wireless communication node of claim ~~30~~ 31, wherein the MAC layer element determines acceptance of the request and schedules transmission of the data element without resort to any network layer element.

Claim 33 (Currently Amended): The wireless communication node of claim ~~30~~ 31, wherein the wireless communication node is an IEEE 802.11 access point.

Claim 34 (Cancelled).

Claim 35 (Currently Amended): A first wireless communication node, comprising:
a first MAC layer element adapted to generate a request to transmit a
particular data element, the request including a transmission bandwidth for the data
element and a transmission priority for the data element ~~The first wireless~~
~~communication node of claim 34~~, wherein the first MAC layer element encodes the
transmission priority in an IEEE 802.1Q tag ~~within the request;~~ and
a physical layer element operatively coupled to the first MAC layer element and
adapted to transmit the request to a second wireless communication node having a
second MAC layer element adapted to determine acceptance of the request based on

the transmission bandwidth and schedule transmission of the data element based on the transmission priority.

Claim 36 (Currently Amended): The wireless communication node of claim ~~34~~ 35, wherein the second MAC layer element determines acceptance of the request and schedules transmission of the data element without resort to any network layer element.

Claim 37 (Currently Amended): The wireless communication node of claim ~~34~~ 35, wherein the first wireless communication node is an IEEE 802.11 peripheral station.

Claim 38 (Currently Amended): The wireless communication node of claim ~~34~~ 35, wherein the second wireless communication node is an IEEE 802.11 access point.

Claim 39 (Currently Amended): A method for wireless communication, comprising:
receiving a request to transmit a data element, the request including a transmission bandwidth for the data element and a transmission priority for the data element, the transmission priority being encoded in an IEEE 802.1Q tag within the request; and

determining acceptance of the request based on the transmission bandwidth and scheduling transmission of the data based on the transmission priority without resort to any network layer element.

Claim 40 (Previously presented): The method of claim 39, wherein the determining and scheduling steps are performed by a MAC layer element.

Claim 41 (Previously presented): The method of claim 39, wherein the method is performed by an IEEE 802.11 access point.